# **FAO** training workshops

Four international CBFiM training workshops were held in South Africa, Belize, Indonesia and China, respectively, between 2004 and 2009 (Figure 1). These workshops were organized by FAO and a number of its partners. The workshops sought out participation from natural resource management professionals with expertise in developing participatory fire management policies, legislation, strategies, guidelines and work plans for community participation. Workshop participants in South Africa and Belize had been trained as CBFiM trainers and placed in positions as facilitators and sources of knowledge and information in their existing daily duties. This intention, however, was not embedded in national programmes or approaches, and there was no opportunity for follow-up or support for the participants. Consequently there is no certainty that the exposure and skills delivered by the training were then passed on. For CBFiM trainers to be able to train others they would need to be accredited trainers of trainers themselves and to operate in an environment where the opportunities and resources for training were made available.

# **LEARNING OBJECTIVES**

The objectives of the workshops hosted in Indonesia and China differed slightly; their focus placed more emphasis on raising participant awareness about CBFiM and fire use. With the relatively low recognition and identification of CBFiM outside projects, case studies and interested actors, these workshops provided a strong introduction to the topic as a step towards increasing the scope of awareness and the body of interest. Through an increased understanding of community-based natural resource management approaches, it is anticipated that participants at the four workshops will contribute to the improved environmental management of resources in their home countries.

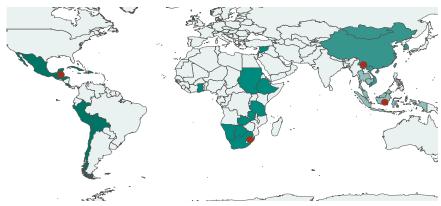


Figure 1

Locations of the four international FAO-sponsored CBFiM training workshops (2005–2009)

The shading indicates those countries represented at each workshop

To achieve these objectives the CBFiM training workshops were designed to deal with concepts at several levels of the learning continuum using a Taxonomy of Learning Objectives as a guideline.<sup>5</sup> The taxonomy identifies levels of cognitive learning and is useful in setting up workshops to match the requirements of different groups and combinations of people.

### Level 1. Knowledge

At the first level of the continuum, workshop participants are exposed to information that includes concepts in fire management, fire science and ecology and, more specifically, CBFiM. This information is disseminated either through a series of presentations or field-based activities.

# Level 2. Comprehension

In order to attain comprehension, each participant is assigned to a small working group for the duration of the workshop. Within these groups participants are periodically required to discuss the various workshop presentations and reading materials and to complete assignments relevant to those materials. This approach is designed to promote collaboration, teamwork and increased comprehension of workshop educational materials.

# Level 3. Application

The third level of learning employed in the workshops focuses on application. Each working group is required to prepare assigned materials for presentation to the other workshop participants. Individual groups are expected to present the assigned materials using one of a variety of methods, including but not limited to, role-playing, formal presentations (such as slide shows, posters and flip charts) and puppet shows.

The primary focus of each CBFiM training workshop was to:

- provide a forum on CBFiM within the workshop region;
- prepare mechanisms for the exchange of information and resources regarding fire manaement in forests and other wildlands within the region, including the establishment of partnerships for joint activities in fire research, training and policy development; and
- enable the preparation of proposals to governments and international organizations within the region to establish mechanisms for sharing resources in fire management and in large fire emergencies, in accordance with existing international procedures.

The general approach taken and the objectives outlined for each of the four training workshops were similar. However, the workshops hosted in Indonesia and China were shorter, as they did not include extensive practical "hands-on" training in the application of prescribed fire (as existing national policies severely restrict the use of fire in those countries). Brief summaries of the workshops follow.

<sup>5</sup> Mike Jurvélius is a training expert who developed the Taxonomy in 1986 as a means of comparing the level of learning among workshop participants.

## **SOUTH AFRICA (2004)**

The Training Course for Instructors in CBFiM was held in Nelspruit, South Africa, from 20 October to 12 November 2004. Organizers for the training course included FAO and GFMC through the United Nations International Strategy for Disaster Reduction (UNISDR) Regional Sub-Saharan Wildland Fire Network (AfriFireNet) and the GFMC Wildland Fire Training Center Africa (WFTCA). The primary objective of this training course was to collate information about CBFiM in the region and analyse the experiences gained since the first landscape-level projects were started in 1996. The countries represented at this workshop included Botswana, Ethiopia, Ghana, Namibia, South Africa, Sudan, Syrian Arab Republic, United Republic of Tanzania and Zimbabwe.

Nearly half of the global area affected by fires each year is in sub-Saharan Africa, comprising approximately 170 million hectares. While some of this burning is both sound and useful, ecologically, a large share of it is harmful and damaging to the environment. There is a need to reduce the area affected by unnecessary or harmful burning, to develop proactive fire management approaches and to better understand the underlying causes of these fires.

Land-management professionals in this region need to look for solutions beyond conventional fire management approaches, which at present are mainly effective only in private plantations. The sustainable management of fires in areas outside plantation forests requires the identification of other solutions. Potential solutions could concentrate on facilitating the transfer of fire management responsibility to local communities, NGOs and women's groups, or recognizing the potential to apply an ecosystem approach wherein all fires, regardless of their purpose (for agriculture, land clearing, beekeeping, hunting, cooking or heating), could be managed by the local people.

### **BELIZE (2005)**

The Training Course for Instructors in CBFiM organized by FAO, Asociación Vivamos Mejor Guatemala, Programme for Belize and The Nature Conservancy was held in the Rio Bravo conservation area in Belize from 7 to 18 November 2005. The objectives of this training course were: to obtain and synthesize existing data and experiences in the Mesoamerica region on the handling of fire at the community level; to identify the obstacles found in this process; and to stimulate the development of fire-use programmes at the community level in locations where the excessive or unsuitable use of fire is problematic. A key element of the course was to address existing government policies that discourage community-level fire management. The training course outlined the necessary reforms that would allow the controlled use of fire. The workshop included participants from Belize, Chile, Costa Rica, Cuba, the Dominican Republic, Guatemala, Honduras, Mexico, Peru and the Plurinational State of Bolivia.

Many ecosystems in Mesoamerica undergo wildfires every year. Some of these

fires are acceptable; however, a significant number of them are not ecologically appropriate and have the potential to damage the environment and impact local communities. In Mesoamerica, it has become a priority to manage the amount of forested area affected by both beneficial and detrimental fires. The objectives of this strategy are to protect forested areas from fire and to promote the sustainable use of forests. A key element in this approach is the promotion of safe and effective management of beneficial fires by local communities.

The workshop participants considered it important to identify the underlying causes of these fires rather than simply to increase the capacity to extinguish fires or to create and impose restrictive laws for burning. At the time of the workshop the conventional approach to solving the problem of undesirable fires was to implement fire-control programmes designed to detect and fight fires when and where they occurred. For many reasons, the majority of these programmes were failing. In response, a number of NGOs began to focus their efforts on the management of fire at the local or community level where rural populations benefit directly from fire and its appropriate uses. The CBFiM training course helped to facilitate those efforts.

#### **INDONESIA (2007)**

The Training Course for Instructors in CBFiM organized by FAO and The Nature Conservancy was held in Balikpapan, East Kalimantan, Indonesia, from 28 October to 4 November 2007. The aims of this training course were to collate regional information about CBFiM, to analyse the experiences gained, and to increase local capacity to create proactive fire management approaches and national strategies in the appropriate use of fire as a management tool. The workshop was regional in scope and included participants from Cambodia, China, Indonesia, Malaysia and Thailand.

Over the past thirty years, the frequency and intensity of fires in South Asia has increased. From 1997 to 1998, nearly 10 million hectares were burned in Indonesia, resulting in damages estimated at nearly US\$ 9 billion. The ecological, human and economic impacts of fire are further exacerbated during El Niño years. More than one-third of terrestrial habitats in Southeast Asia are considered fire sensitive; they suffer from too much fire primarily as a result of ecologically damaging fire use for agriculture or clearing for rural and urban development. While some of the burning activity in this region is ecologically sound and useful, much of it is harmful and damaging to the environment. Many communities in countries located in this region are quite familiar with the uses of fire in traditional livelihood activities, such as clearing vegetation for agriculture, hunting and management of NTFPs. Communities have played a significant role historically in the management of fire in many areas of the region, but changes in land-use patterns, and top-down fire-related policy and legislation often conflict with traditional fire-use practices.

### **CHINA (2009)**

The Workshop on CBFiM in the North Asian Region organized by FAO, The Nature Conservancy (TNC) and the China State Forestry Administration was held in Xishuangbanna, Yunnan, China, from 9 to 14 March 2009. The primary objective of this training course was to collate information about CBFiM in the northeast Asian region, analyse the experiences gained and increase the local capacity in creating proactive fire management approaches and national strategies in the appropriate use of fire as a management tool. Countries represented at the workshop included China, Mongolia, Republic of Korea and Viet Nam.

This workshop was hosted in the northeast Asia region to address the need to highlight the existing legislative and policy constraints on involving and transferring fire management responsibilities from government to local communities. Issues include the need to present positive solutions to legislative constraints by highlighting experiences both within China and in its neighbouring countries.

In China most occurrences of forest fires are concentrated in a small number of regions. The highest number and largest sizes of forest fires occur in five provinces: Heilongjiang, Inner Mongolia, Yunnan, Guangxi and Guizhou. These regions tend to have the majority of forest cover; are exposed to more climatic extremes, including extreme wind events; and are remote, with limited access and fire management (prevention and control) facilities. Specific fire-related threats include lightning and uncontrolled accidental fires in forests, savannahs and grasslands. With the exception of the northeastern forest regions in China, where many fires are the result of lightning strikes, 95 percent of all fires in China and other countries in the region are caused by human activities.

#### **ANALYSIS**

Feedback collected from participants in the four FAO-supported international CBFiM training workshops revealed that the geographic scale at which training workshops are implemented is an important consideration. The FAO training workshops that were hosted in South Africa, Belize, Indonesia and China between 2004 and 2009 were all regional in scope. However, many of the participants indicated that training workshops of this nature should have more of a focus on national or sub-national fire management issues. A lack of technical support following training was also identified by some participants as being an obstacle to the successful long-term implementation of CBFiM. Both of these issues – the geographic focus of CBFiM training and the availability of technical support following training – should be given more attention in the design, resourcing and implementation of subsequent CBFiM training workshop planning efforts. CBFiM training workshops designed to increase the expertise of practitioners should be conducted at an appropriate scale and should be followed up with an adequate level of technical support.

